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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/726,990	11/30/2000	Yoshihiro Watanabe	FUJR 17.945	2116

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575 MADISON AVENUE
NEW YORK, NY 10022-2585

EXAMINER

FOX, JAMAL A

ART UNIT	PAPER NUMBER
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2664

DATE MAILED: 05/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/726,990

Applicant(s)

WATANABE, YOSHIHIRO

Examiner

Jamal A Fox

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 November 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 09/726,990.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of **50 to 150 words**. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The abstract of the disclosure is objected to because of *undue length*.

Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-5 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,715,237 to Akiyoshi.
5. Referring to claim 1, Akiyoshi discloses a redundant structure control device (Fig. 2) for an exchange having a spare line interface device (Fig. 2, ref. sign LT1 and

respective portions of the spec.), comprising frame tag attaching means (Fig. 3, ATC ref. signs 122a and 122b) for attaching a routing header to a frame coming in from lines or line interface devices and giving a tag information in said routing header, frame switching means (intra SW routing data (TAGA), col. 19 lines 34-50) for switching a destination of said frame to which tag information has been given, in accordance with said tag information, routing control means (Figs. 1 and 2, ref. sign CTL 14 and respective portions of the spec.) for monitoring states of said line interface devices, and when trouble happens at one of said line interface devices, sending out a control signal (TAGA, col. 19 lines 34-50) to said frame tag attaching means so that a frame coming from a line originally connected with said line interface device at which trouble has happened may be switched over to said spare line interface device, and arranging said frame tag attaching means so that a frame coming from said spare line interface device may flow to said line originally connected with said line interface device at which trouble has happened.

Referring to claim 2, Akiyoshi discloses a redundant control device (Fig. 2) for an exchange according to claim 1, wherein a device arranged between an asynchronous transmission mode switch (Fig. 2) and said line interface devices (Fig. 2, ref. signs LT0 and LT1 and respective portions of the spec.), for delivering cells coming from said asynchronous transmission mode switch toward said line interface devices, one by one (TAG data can be done for each cell, col. 19 lines 34-50), in accordance with tag information given to each of said cells, to said line interface devices includes tag changing means for changing a value of a tag of a cell indicating that the cell should be

sent from said asynchronous transmission mode switch to a line interface device at which trouble has happened, to a value indicating that the cell should be routed to said spare line interface device (Fig. 2, ref. sign LT1 and respective portions of the spec.), in accordance with instructions from said routing means.

Referring to claim 3, Akiyoshi discloses a redundant control device (Fig. 2) for an exchange according to claim 2, wherein said spare line interface device (Fig. 2, ref. sign LT1 and respective portions of the spec.) includes memory means (Fig. 2, ROM 128 and respective portions of the spec.) for storing path information for all line interface devices for current use, and path-information placing means (Fig. 2 RAM 127 and respective portions of the spec.) for reading path information for a line interface device at which trouble has happened from said memory means and placing said path information in position, in accordance with instructions from said routing control means.

Referring to claim 4, Akiyoshi discloses a redundant structure control device (Fig. 2) for an exchange according to claim 2, wherein said spare line interface device (Fig. 2, ref. sign LT1 and respective portions of the spec.) has the same structure as each line interface device (Fig. 2, ref. sign LT0 and respective portions of the spec.) for current use has, and a call processor (Fig. 3, CPU 26 and respective portions of the spec.) arranged to transfer path information stored in a line interface device at which trouble has happened to said spare line interface device.

Referring to claim 5, Akiyoshi discloses a redundant structure control device (Fig. 2) for an exchange having a spare line (Fig. 2 ref. sign $\phi 2$ and respective portions of the spec.), comprising frame tag attaching means (Fig. 3, ATC ref. signs 122a and 122b) for

attaching a routing header to a frame coming in from lines or line interface devices and giving tag information in said routing header, frame switching means (intra SW routing data (TAGA), col. 19 lines 34-50) for switching a destination of said frame to which tag information has been given, in accordance with said tag information, line trouble monitoring means (Fig. 7, ref. signs α and β and col. 16 lines 13-17) arranged between said lines and said frame switching means, for monitoring line trouble, and routing control means (Figs. 1 and 2, ref. sign CTL 14 and respective portions of the spec.) for identifying, based on line trouble information from said line trouble monitoring means, a line interface device (Fig. 2, ref. sign LT0 and respective portions of the spec.) connected with a line (Fig. 2 ref. sign $\phi 1$ and respective portions of the spec.) at which trouble has happened, and arranging said frame tag attaching means (Fig. 3, ATC ref. signs 122a and 122b and respective portions of the spec.) so that a frame coming from said identified line interface device towards said line (Fig. 2, LT0) at which trouble has happened may be sent out to said spare line (Fig. 2 ref. sign $\phi 2$ and respective portions of the spec.).

Referring to claim 7, Akiyoshi discloses a method of controlling a redundant structure (Fig. 2) for an exchange having a set of spare line (Fig. 2 ref. sign $\phi 2$ and respective portions of the spec.) and a spare line interface device (Fig. 2, ref. sign LT1 and respective portions of the spec.), comprising a step of attaching a routing header to a frame coming in from lines or line interface devices, and giving tag information in said routing header (col. 18 lines 23-26 and col. 18 lines 30-42), and a step of switching a

destination of said frame to which tag information has been given, in accordance with said tag information, on a line basis (col. 19 lines 34-50).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being obvious over Akiyoshi in view of Watanabe et al.

The applied reference has a common *assignee* and *inventor* with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). For applications filed on or after November 29,

1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(I)(1) and § 706.02(I)(2). Referring to claim 6, Akiyoshi, discloses a redundant structure control device (Fig. 2) for an exchange having a set of a spare line (Fig. 2 ref. sign $\phi 2$ and respective portions of the spec.) and a spare line interface device (Fig. 2, ref. sign LT1 and respective portions of the spec.), comprising frame tag attaching means (Fig. 3, ATC ref. signs 122a and 122b) for attaching a routing header to a frame coming in from lines or line interface devices and giving tag information in said routing header, frame switching means (intra SW routing data (TAGA), col. 19 lines 34-50) for switching a destination of said frame to which tag information has been given, in accordance with said tag information, line trouble monitoring means (Fig. 7, ref. signs α and β and col. 16 lines 13-17) arranged between said lines and said frame switching means, for monitoring line trouble, routing control means (Figs. 1 and 2, ref. sign CTL 14 and respective portions of the spec.) for monitoring states of said line interface devices, and when trouble happens at one of said line interface devices, sending out a control signal (TAGA, col. 19 lines 34-50) to said frame tag attaching means so that a frame coming from a line originally connected with said line interface device at which trouble has happened may be switched over to said spare line interface device, and arranging said frame tag attaching means so that a frame coming from said spare line interface device may flow to said line originally connected with said line interface device at which trouble has happened; and identifying, based on line trouble information from

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said line trouble monitoring means, a line interface device connected with a line at which trouble has happened, and arranging said frame tag attaching means so that a frame coming from said identified line interface device towards said line at which trouble has happened may be sent out to said spare line, but does not explicitly teach of a tag changing means provided in an asynchronous transmission mode concentrator arranged between said line interface devices and an asynchronous transmission mode switch, for changing a value of a tag of a cell indicating that the cell should be sent from said asynchronous transmission mode switch to a line interface device at which trouble has happened, to a value indicating that the cell should be routed to said spare line interface device, in accordance with instructions provided by said routing means when said routing means detects trouble happening at one of said line interface devices. However, Watanabe et al. discloses a tag changing means (Fig. 23, 16-4' AIS tag setting section and respective portions of the spec.) provided in an asynchronous transmission mode concentrator (Fig. 23, concentrator 16 and col. 23 lines 26-37) arranged between said line interface devices and an asynchronous transmission mode switch, for changing a value of a tag of a cell indicating that the cell should be sent from said asynchronous transmission mode switch to a line interface device at which trouble has happened, to a value indicating that the cell should be routed to said spare line interface device, in accordance with instructions provided by said routing means when said routing means detects trouble happening at one of said line interface devices. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to have included the tag changing means provided in an

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asynchronous transmission mode concentrator of Watanabe et al. to the invention of Akiyoshi in order to detect the occurrence of a failure as suggested by Watanabe et al.

Conclusion

8. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 305-3988, (for formal communications intended for entry)

Or:

(703) 305-3988 (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121
Crystal Drive, Arlington, VA. 22202, Sixth Floor (Receptionist).

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jamal A. Fox whose telephone number is (703) 305-5741. The examiner can normally be reached on Monday-Friday 6:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on (703) 305-4366. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9315 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.

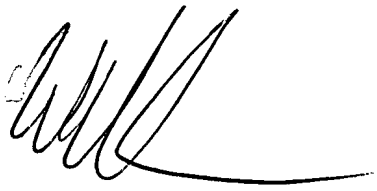
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J.A.F.

Jamal A. Fox



WELLINGTON CHIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600